

CLAIM AMENDMENTS

Please amend claims 1, 5-6, 15, 16, 17, 19-20, 29-30, cancel claims 14-28, and enter new claims 31-32 as follows

1. (Currently Amended) A method for detecting contaminants during a semiconductor fabrication operation involving a semiconductor coating device, said method comprising the steps of:

generating a beam of laser light from a ~~said~~ laser light source attached to at least one coater cup associated with said semiconductor coating device utilized in said semiconductor fabrication operation, wherein said at least one coater cup is comprises a transparent material; and

automatically terminating said semiconductor fabrication operation, in response to detecting said contaminants utilizing said beam of laser light, wherein said contaminants are scattered as a result of said semiconductor fabrication operation.

2. (Original) The method of claim 1 further comprising the step of: detecting contaminants utilizing said beam of laser light.

3. (Original) The method of claim 1 further comprising the step of: attaching a laser light source to said at least one coater cup associated with said semiconductor coating device.

4. (Original) The method of claim 1 wherein said coater cup comprises a photoresist (PR) cup.

5. (Currently Amended) The method of claim 1 wherein said laser light source comprises a laser generator comprising an edge emitting laser or a solid state semiconductor light emitter.
6. (Currently Amended) The method of claim 1 wherein said laser light source comprises a laser detector comprising an edge emitting laser or a solid state semiconductor light emitter.
7. (Original) The method of claim 1 wherein said laser light source comprises a laser generator integrated with a laser detector.
8. (Original) The method of claim 1 wherein said semiconductor fabrication operation comprises a wafer spin coating operation.
9. (Original) The method of claim 1 wherein said contaminant comprises dust.
10. (Original) The method of claim 1 wherein said contaminant comprises photoresist (PR) dust scattered as a result of a wafer spin coating operation.
11. (Original) The method of claim 1 further comprising the step of: detecting contaminants utilizing said beam of laser light, wherein said contaminants comprise an abnormal photoresist dust flow.
12. (Original) The method of claim 1 further comprising the step of: detecting contaminants utilizing at least one laser detector to detect said beam of laser light generated from said laser light source.

13. (Original) The method of claim 12 wherein said laser light source is generated by at least one laser generator.

14. (Cancelled)

15. (Currently Amended) The method of claim 1 ~~14~~ wherein said transparent material comprises quartz.

16. (Currently Amended) The method of claim 1 ~~14~~ wherein said transparent material comprises glass.

17. (Currently Amended) A system for detecting contaminants during a semiconductor fabrication operation involving a semiconductor coating device, said system comprising:

a ~~said~~ laser light source attached to at least one coater cup associated with said semiconductor coating device utilized in said semiconductor fabrication operation, wherein said laser light source generates a beam of laser light, wherein said at least one coater cup comprises a transparent material;

a laser detector for detecting contaminants utilizing said beam of laser light, such that said contaminants are scattered as a result of said semiconductor fabrication operation; and

wherein said semiconductor fabrication operation is automatically terminated, in response to detecting said contaminants utilizing said beam of laser light.

18. (Original) The system of claim 17 wherein said coater cup comprises a photoresist (PR) cup.

19. (Currently Amended) The system of claim 17 wherein said laser light source comprises a laser generator comprising an edge emitting laser or a solid state semiconductor light emitter.

20. (Currently Amended) The system of claim 17 wherein said laser light source comprises a laser detector comprising an edge emitting laser or a solid state semiconductor light emitter.

21. (Original) The system of claim 17 wherein said laser light source comprises a laser generator integrated with a laser detector.

22. (Original) The system of claim 17 wherein said semiconductor fabrication operation comprises a wafer spin coating operation.

23. (Original) The system of claim 17 wherein said contaminant comprises dust.

24. (Original) The system of claim 17 wherein said contaminant comprises photoresist (PR) dust scattered as a result of a wafer spin coating operation.

25. (Original) The system of claim 17 wherein said contaminants comprise an abnormal photoresist dust flow.

26. (Original) The system of claim 17 wherein said contaminants are detectable utilizing at least one laser detector to detect said beam of laser light generated from said laser light source.

27. (Original) The system of claim 26 wherein said laser light source is generated by at least one laser generator.

28. (Cancelled)

29. (Currently Amended) The method of claim 17 ~~28~~ wherein said transparent material comprises quartz.

30. (Currently Amended) The method of claim 17 ~~28~~ wherein said transparent material comprises glass.

31. (New) A system, comprising:

- a plurality of photoresist cups associated with a semiconductor coating device for use in a semiconductor fabrication operation;

- at least one laser light source attached to each photoresist cup of said plurality of photoresist cups, wherein said at least one laser light source comprises a laser generator integrated with a laser detector;

- wherein said laser detector detects contaminants utilizing at least one beam of laser light generated by said laser light source, such that said contaminants are scattered as a result of said semiconductor fabrication operation; and

- wherein said semiconductor fabrication operation is automatically terminated, in response to detecting said contaminants utilizing said at least one beam of laser light.

32. (New) The system of claim 31 wherein said at least one laser light source comprises an edge emitting laser or a solid state semiconductor light emitter.